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The Commonwealth of Massachusetts

ANNUAL REPORT

OF THE

Commission

OF THE

Department of Public Utilities

FOR THE

Year Ending November 30, 1937



DEPARTMENT OF PUBLIC UTILITIES

ANNUAL REPORT

Boston, January 19, 1938.

*To the Honorable Senate and House of Representatives
in General Court Assembled:*

We respectfully submit the Eighteenth Annual Report of the Commission of the Department of Public Utilities for the fiscal year ended November 30, 1937.

Professor John J. Murray, Chairman of the Department, resigned December 18, 1936, to accept appointment as a member of the Board of Tax Appeals. The vacancy caused by his resignation was filled by the appointment of John J. Curley, of Boston, who assumed the duties of Commissioner December 19, 1936. The vacancy caused by the death on November 1, 1936, of Henry C. Attwill was filled by the appointment of A. C. Webber, of Newton, who was designated Chairman of the Department by the Governor, and assumed the duties of his office December 30, 1936.

Andrew A. Highlands, Secretary of the Department, died September 10, 1937. He had served continuously as Secretary of the Department and of its predecessor, the Public Service Commission, since October 24, 1913. Following the passage in 1921 of the Sale of Securities Act the active work connected with the administration of the act by the Commission was assigned to Mr. Highlands in addition to his duties as Secretary of the Department. The Commission records its deep sense of loss in the passing of a loyal associate, and its appreciation of his long and faithful service to the Commonwealth.

The Commission, on September 14, 1937, appointed Allan Brooks, Administrative Secretary, as Secretary of the Department to fill the vacancy caused by the death of Mr. Highlands.

The number of corporations, private and municipal, persons, firms, and associations under the jurisdiction of and filing annual returns with the Department, exclusive of those filing under the Sale of Securities Act, is as follows:

Steam railroads	22	Electric companies	42
Street railways	19	Water companies	77
Telephone companies	14	Motor bus lines	57
Telegraph companies	3	Municipal lighting plants	41
Steamboat companies	2	Manufacturing and other compa-	
Sleeping car companies	1	nies doing an electric business 4	
Express companies	3	Voluntary associations	27
Gas companies	45		
Total			357

In addition to the above there are under the jurisdiction of the Department 919 common carriers and 11,368 contract carriers operating motor vehicles for the transportation of property for hire within the Commonwealth under the provisions of chapter 264 of the Acts of 1934 as amended.

During the year the Commission held 698 formal hearings and many conferences. The volume and character of the work requiring the Department's attention during the fiscal year are shown by the following tabulation:

Petitions and Applications: Railroad, 203; street railway, 64; gas and electric, 112; water, 9; motor bus, 109; motor truck, 74; telephone and telegraph, 9; steamboat, 11; sale of securities, 29; miscellaneous, 12; total, 632.

Complaints: Railroad, 141; street railway, 13; gas, 139; electric, 409; water, 24; motor bus, 89; motor truck, 673; telephone and telegraph, 491; sale of securities, 1,342; smoke abatement, 173; total, 3,494.

Rate Schedules: Railroad, freight service, 1,366; passenger service, 237; express, 196; street railway, 47; telephone, 24; telegraph, 8; motor bus, 151; motor truck, 657; electricity, 235; gas, 43; water, 7; gas, electric and water contracts, 260; total, 3,231 tariffs.

The appropriation for the Department and its expenditures for the fiscal year ended November 30, 1937, are given below:

Appropriations	\$378,642.36
Expenditures	363,254.67
Balance	\$ 15,387.69

The receipts of the Department for the same period are shown in the following itemized statement:

Gas, Electric and Water Division:	
Fees, gas meter tests	\$33,144.75
Fees, electric meter tests	22.00
Fees, blank forms and maps	217.50
	\$ 33,384.25
Public Service Division:	
Motor Buses:	
Fees, bus permits	\$ 3,270.50
Fees, drivers' licenses	3,094.00
	6,364.50
Miscellaneous:	
Fees, copies of documents	—
Fees, blank forms	\$ 12.00
	12.00
Commercial Motor Vehicle Division:	
Motor Trucks:	
Fees, common carrier certificates	\$ 340.00
Fees, contract carrier permits	20,418.00
Fees, distinguishing plates	31,856.00
Fees, copies of documents	154.10
	52,768.10
Securities Division:	
Fees, registration of brokers	\$32,100.00
Fees, registration of salesmen	17,605.00
Fees, copies of documents	14.70
Miscellaneous sales	3.00
	49,722.70
Rent of Land, Brattle square. Cambridge (Cambridge subway)	4,600.00
Total	\$146,851.55

Financial Statement Verified.

Approved:

GEO. E. MURPHY.
Comptroller.

SPECIAL INVESTIGATIONS

Twenty-three investigations have been made by the Department upon its own motion during the fiscal year ended November 30, 1937, the character of which is shown below:

Electricity, rates and charges	9
Gas, rates and charges	3
Water, rates and charges	1
Motor Trucks, rates and charges	5
Motor Bus, rates of fare	1
Railroads, freight rates	1
Railroads, passenger time-table changes	1
Telephones, rates and charges on hand sets and changes of equipment	2
Total	23

Pursuant to the provisions of section 3 of chapter 333 of the Acts of 1931, and upon notice from the Trustees of the Boston Elevated Railway Company of a deficit in the operation of the railway for the year ending March 31, 1937, the Department has made an investigation of the operations and expenses of the company, and a report (the sixth since the enactment of the statute) will be transmitted to the Governor and to the members of the Metropolitan Transit Council.

Chapter 37 of the Resolves of 1937 provided for a survey and study by a special commission relative to the laws of the Commonwealth relating to the promotion and sale of securities, and certain related matters. A report of the special

commission, of which the Chairman of the Department was a member, has been made to the General Court.

Chapter 60 of the Resolves of 1937 provided for an investigation and study by a special commission relative to certain problems in the Merrimack Valley, so-called, concerning, among other matters, transportation service and facilities, establishment of a sewerage district, purification of the waters of the Merrimack river, water supply and flood control. A report of the special commission, of which William J. Keefe, chief engineer of the Department, was designated a representative of the Commission, has been made to the General Court.

CAPITAL STOCK AND BONDS

Twelve applications for approval of issues of stock, bonds or notes of public utilities were decided during the year which ended November 30, 1937. The par value of securities to the amount of \$22,692,400.00 was approved.

The following table shows the securities approved by the Commission for the several companies applying therefor, giving both the par value of the capital stock and the issue price thereof, determined as required by law:

COMPANY	Capital Stock Approved			Bonds . Approved at Par	Date 1937
	Amount at par	Issue Price	Value at Issue Price		
Boston Consolidated Gas Co.	—	—	—	\$10,900,000 ¹	Jan. 22
Boston Elevated Railway Co.	—	—	—	2,098,000 ²	Jan. 8
Boston Elevated Railway Co.	—	—	—	4,800,000 ²	Sept. 15
Boston Metropolitan District ³	—	—	—	2,098,000	Jan. 8
Boston Metropolitan District ³	—	—	—	4,800,000	Sept. 15
Brockton Gas Light Company	—	—	—	850,000 ¹	Oct. 29
Greenfield Gas Light Company	—	—	—	50,000	Apr. 9
Northern Berkshire Gas Co. ⁴	\$ 100	\$100	\$ 100	—	Apr. 26
Northern Berkshire Gas Co. ⁵	4,300	100	4,300	—	Oct. 8
Old Colony Gas Company	—	—	—	590,000 ¹	Feb. 19
Southbridge Water Supply Co.	—	—	—	200,000	July 26
Springfield Gas Light Company	—	—	—	500,000 ¹	June 3
Springfield Gas Light Company	—	—	—	300,000 ¹	July 20
Webster and Southbridge Gas and Electric Company	2,400,000	25	2,400,000	—	Aug. 16

¹ Notes

² Refunded notes.

³ Approved as to maturity and interest rate only.

⁴ To purchase the Deerfield River Electric Company.

⁵ To purchase the Charlemont Electric Light and Power Company.

⁶ To purchase the Worcester Electric Light Company. Name now changed to Worcester County Electric Company.

GAS, ELECTRIC AND WATER UTILITIES

By order of the Department or through the commendable cooperation of officials of companies with the Commission, after many conferences, reductions in the rates and charges of 35 electric companies have been made during the fiscal year, with annual savings to customers estimated as follows:

Domestic customers	\$ 964,659
Commercial customers	845,469
Power and street lighting customers	432,058

Total	\$2,242,186
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In addition, the rates and charges of 11 gas companies have been reduced during the year with estimated annual savings to customers amounting to \$57,663.

In the field of rural electrification the Commission is able to report substantial as well as significant progress. During the year, over 212 miles of electric lines to rural areas of the state, reaching approximately 1,100 customers, heretofore without service, have been constructed by the various companies whose territory includes such areas. The cost of these extensions amounted to approximately \$334,000, and plans have been prepared or are in preparation for many miles of further extensions in similar districts at an early date.

During the fiscal year 129,184 gas meters have been tested by the Gas, Electric and Water Division, and those found correct were badged and sealed in accordance with the statute. This figure compares with 80,687 meters tested in the previous year, the increase of 48,497 meters tested being due mainly to the replacement periodically of gas meters under the provisions of chapter 259 of the Acts of 1936. Of these 129,184 meters, 773 were tested on complaint either of the customer or of the company, of which 4 would pass gas but would not register while 1 neither passed gas nor registered. The average error of the remaining 768 meters was 1.40 per cent fast as compared to 1.76 per cent fast in 1936. In addition, 8 wet meters, 3 two-foot meter provers, 17 five-foot provers, and 1 ten-foot prover, and 9 calorimeter thermometers have been calibrated for the use of various companies. Owing to the passage of the 1936 act requiring the retesting of all gas meters in service over seven years, 19 new gas meter testing stations have been established and approved for use. Five electric meters have been tested on complaint of customers.

During this period, 295 tests of the quality of the gas supplied by the 49 companies distributing gas in the Commonwealth have been made. Sixteen violations of the legal standards were found and offending companies were warned. Five hundred and seventy-one complaints relating to service, rates, high bills, etc., have been carefully investigated. Of these, 139 were against gas companies, 408 against electric companies and 24 against water companies.

In conjunction with the Engineering Division of the Department investigations and estimates have been made of the cost of the extension of gas, electric and water service, and arrangements completed for many such extensions without formal hearing before the Commission.

A total of 506 accidents have been reported during the fiscal year under the provisions of section 95 of chapter 164 of the General Laws. Of this number, 174 were fatal, 160 being reported as caused by gas and 14 as caused by electricity.

All annual returns required to be filed by gas, electric and water companies were filed with the Department within the time limit prescribed by law, except the annual return of the Lowell Gas Light Company.

MUNICIPAL LIGHTING PLANTS

We herewith set forth a list of municipal plants with percentage earnings, which, from reports filed in 1937 for the year 1936, appear to have violated the provisions of the statute requiring such plants to reduce their rates when they have earned a profit in excess of the 8 per cent allowed by law:

Hingham	9.21%
Norwood	12.39%
Peabody	30.78%

Each of the plants in the above-named municipalities reduced its rates during the period covered by this report.

It also appears that the following municipalities have violated that part of the statute which provides that the town shall include in the annual appropriations and in the tax levy not less than the estimated cost of the gas and electricity to be used by the town. Records of street lighting only are available, and these figures are as follow:

Town	Estimated amount which should have been paid	Town paid only
Ashburnham	\$ 1,493.39	\$ 650.00
Chicopee	33,215.62	31,535.40
Danvers	16,574.06	14,300.00
Georgetown	2,346.47	900.00
Groton	6,689.51	5,500.00
Groveland	3,142.83	1,800.00
Hingham	10,042.38	8,652.04

Hudson	6,136.47	5,000.00
Hull	15,173.97	12,650.00
Merrimae	3,113.58	2,468.72
North Attleborough	8,078.72	5,000.00
Peabody	12,529.74	—
Reading	18,575.42	17,500.00
Shrewsbury	6,224.53	5,500.00
Taunton	36,888.88	32,500.00
Wakefield	19,492.14	18,000.00
Wellesley	20,404.04	16,880.00

ENGINEERING

The Chief Engineer of the Department was designated a representative of the Commission on the special commission established by chapter 60 of the Resolves of 1937 to investigate and study certain problems in the Merrimack Valley. Many conferences and three public hearings were held. A report embodying the result of the investigation and study of the commission, and its recommendations, has been made to the General Court.

The Engineering Division has made an investigation and report to the Commission in connection with the investigation made by the Department, pursuant to section 3 of chapter 333 of the Acts of 1931, of the deficit in the operation of Boston Elevated railway for the year ended March 31, 1937.

The Division has made an examination of plans and specifications for the elimination of three railroad grade crossings by the Department of Public Works during the year.

Investigations and reports have been made to the Department on the capital expenditures and retirements of the following-named companies:

Boston Elevated Railway.
Barnstable County Gas Company.
Buzzards Bay Gas Company.
Greenfield Gas Light Company.

Cape and Vineyard Electric Company.
Montaup Electric Company.
Springfield Gas Company.
Greenfield Gas Company.

and plant accounts of 45 companies out of 137 were checked.

A physical valuation was made of the property of the New England Telephone and Telegraph Company in the town of Tewksbury in connection with a rate case pending before the Department.

Reports were made to the Department on 101 proposed bus routes and 6 trackless trolley routes.

During the year, this Division made a special inspection of 103 bridges carrying railroads, street railways or buses. Restrictions were recommended on 11 of these bridges and the discontinuance of the operation of buses and trolley cars over 1 bridge.

Investigations and reports were made relative to the quality of the water at the following-named companies:

Cottage City Water Company.
Holliston Water Company.

Housatonic Water Company.
Hingham Water Company.

In conjunction with the Gas, Electric and Water division, an investigation was made of 63 complaints relative to extensions and other matters requiring engineering assistance.

Assistance was rendered the Attorney General before the Superior Court on a petition for reimbursement of expenditures made on account of the proposed elimination of railroad grade crossing in Leominster and in Northampton on the New York, New Haven, and Hartford Railroad, and on two petitions relative to grade crossings in the towns of Amherst and Belchertown on the Central Vermont Railway.

An examination and computation was made of plans showing alterations in

the structure of the Boston Elevated Railway Company at three different locations in the city of Boston.

During the year, 3,231 rate schedules were filed with the Division.

A special investigation of 260 gas and electric rates filed with the Department was made and reported to the Commission.

An investigation of rates for both the Nantucket Gas and Electric Company and Charlemon Electric Company was made.

At the request of the Department of Mental Diseases, an investigation and report was made to that Department of its power facilities and of a proposed contract for the purchase of electricity from the Gardner Electric Light Company.

RAILROADS AND STREET RAILWAYS

During the fiscal year, the Railroad and Railway Division made 13,225 inspections of railroad rolling stock, including locomotives, passenger and freight cars; 5,223 inspections of street railway cars; 157 inspections of trackless trolley coaches; 1,594 inspections of railroad and railway stations; 2,115 inspections of railroad and street railway bridges; 149 inspections of railroad signals, crossing signals and interlockings. In addition, switches and derails, foot blockings, bridge guards, and crossing signs were inspected. Defective conditions were called to the attention of the proper officials of the companies and corrections made.

The Division investigated 183 accidents on railroads and 188 on street railways, and was represented at 22 inquests. One hundred and fifty-four complaints relating to the operation of railroads and railways were investigated and adjusted.

The Division issued 49 railroad police licenses, 19 railway police licenses and 25 steamship police licenses.

Effective November 5, 1937, the Division of Railway and Bus Utilities was established as the Division of Railroad and Railway Utilities, and the duties in relation to the supervision and inspection of motor buses heretofore performed by the Division of Railway and Bus Utilities were assigned to the Commercial Motor Vehicle Division.

The Department, upon its own motion, investigated and held public hearings in the matter of the curtailment and abandonment of passenger service on the Old Colony system of The New York, New Haven and Hartford Railroad Company proposed to be made in its time tables, effective September 26, 1937.

As a result of its investigation the Commission required a considerable portion of the service restored. Since that time the Trustees of the company have filed with the Department petitions for approval of the abandonment of many passenger stations upon its lines and the consequent curtailment of passenger service thereat. These petitions have been assigned for hearing and determination early in 1938.

The following table shows in detail the number of persons killed and injured at railroad grade crossings during the fiscal year ended November 30, 1937:

ACCIDENTS AT GRADE CROSSINGS DURING THE YEAR ENDING
NOVEMBER 30, 1937

RAILROADS	Protected Crossings				Unprotected Crossings			
	Number of Crossings	Killed	Injured	Ratio of Casualties to Crossings	Number of Crossings	Killed	Injured	Ratio of Casualties to Crossings
Boston & Albany	70	—	—	—	83	1	—	1-83
Boston & Maine	433	1	2	1-144	233	1	—	1-233
Boston, Revere Beach & Lynn ..	12	—	—	—	0	—	—	—
Hoosac Tunnel & Wilmington ..	6	—	—	—	2	—	—	—
Central Vermont	7	—	—	—	39	1	—	1-39
New York, New Haven & Hartford	410	—	3	1-137	287	2	5	1-41
Fore River	5	—	—	—	0	—	—	—
Grafton & Upton	0	—	—	—	34	—	—	—
Totals	937	1	5	1-156	678	5	5	1-68

Total number of grade crossing accidents	26
Number involving automobiles	23
Number involving pedestrians	3
Number where employees were injured	1

TELEPHONE AND TELEGRAPH

On November 30, 1937, there were 869,193 telephone stations in Massachusetts, a net gain of 32,671 stations over the preceding year.

During the year mileage charges have been reduced by base rate area extensions in Braintree, Holyoke, Leicester and Springfield. The Worcester Exchange Boundary has been extended into the Leicester Exchange and the Stoughton Exchange boundary extended into the Brockton Exchange. These changes affected 133 subscribers with a net annual saving to them of \$790.

On March 1, 1937, the hand set charge of 15 cents per month was eliminated for subscribers who had used such set for eighteen months. The number of subscribers affected was 94,100, with a decrease in net charges to customers of \$169,400. On October 1, 1937, the Commission abolished the monthly hand set charge of 15 cents which affected 143,000 subscribers, with a reduction of customer charges of approximately \$251,500.

The Commission in its order of September 28, 1937, reduced the change of equipment charge from \$2 to \$1.40. It is difficult to estimate general savings to subscribers in this particular reduction as there is no definite method of establishing the number of requests for changes of equipment during the ensuing year.

A reduction from \$2 to \$1.25 was made in the rate for station amplifier equipment for persons with impaired hearing, or a saving of approximately \$5,000 per year for 556 subscribers.

Season service charges which had been applied to customers within the base rate area of the Pittsfield Exchange at Pontoosuc Lake were eliminated as of June 20, 1937, with an estimated saving of \$300.

There were 491 complaints during the past year. Many of these required intensive study and investigation by the Telephone and Telegraph Division. These surveys resulted in various changes in base rate areas and several improvements in the service.

MOTOR BUS TRANSPORTATION

At the close of the fiscal year there were 77 persons, associations and corporations (including street railway companies) operating motor vehicles within the Commonwealth for the carriage of passengers for hire under certificates of public convenience and necessity granted by the Department. Sixty-six certificates, mainly for extensions of or changes in existing routes, have been issued during the year. There also have been issued 327 bus permits and 4,047 special drivers' licenses for which fees aggregating \$6,364.50 have been received.

During the year 7,437 inspections of buses and 1,097 inspections of highway bridges over which buses operated have been made, and 81 accidents and 89 complaints have been investigated. Operating violations, 69 in number, have been noted and corrected.

On November 5, 1937, pursuant to a vote of the Commission, the duties of supervising and inspecting motor buses, heretofore performed by the Railway and Bus Division, were assigned to the Commercial Motor Vehicle Division.

MOTOR TRUCK TRANSPORTATION

Chapter 33 of the Resolves of 1937 provided for a survey and study by a special commission of the laws of the Commonwealth relating to the transportation of property by motor vehicle. The commission consisted of eleven members, including the Director of the Commercial Motor Vehicle Division, and a report of its investigation and recommendations have been made to the General Court.

Patrick J. Sullivan, Assistant Director of the Commercial Motor Vehicle Di-

vision, resigned his office August 26, 1937, to accept appointment as a member of the Labor Relations Board. The vacancy caused by the resignation of Mr. Sullivan has been filled by the appointment, on August 27, 1937, of David J. McCarthy, of Medford.

Pursuant to a vote of the Commission, effective November 5, 1937, the duties of supervising and inspecting motor buses were assigned to the Commercial Motor Vehicle Division.

There were registered with the Division at the close of the fiscal year ended November 30, 1937, under the provisions of law regulating the operation of motor vehicles transporting property for hire, 919 common carriers, 8,560 contract carriers and 2,808 interstate contract carriers. During the year fees amounting to \$20,758 have been received by the Department covering applications filed for certificates as common carriers, including amendments of original certificates, and permits as contract carriers, including amendments of original permits. In addition, fees received by the Department for distinguishing plates aggregated \$31,856.

During the year 69 hearings have been held by the Division at Boston and other cities in the Commonwealth on 573 applications for permits as contract carriers, and 22 applications were denied. Thirty-seven hearings have also been held on complaints filed with the Division relating to violations of provisions of the motor truck act and the rules and regulations adopted by the Department thereunder. The permits of 9 contract carriers were revoked, and 3 permits were suspended. During the fiscal year 7 appeals from decisions of the Division have been filed with the Commission.

The difficult and complicated matter of proper rates of both common and contract carriers has required much investigation and study by the Commission during the year. Many hearings and conferences have been held on the subject and the Commission has, during this period, prescribed commodity rates for common carriers and minimum rates for contract carriers applying to the transportation of candy, petroleum products, boots and shoes and wool between points within the Commonwealth by motor vehicles.

SALE OF SECURITIES

John H. Backus, of New Bedford, was appointed Director of the Securities Division to succeed John C. Hull, and assumed the duties of his office December 15, 1936.

During the fiscal year 645 brokers and 3,512 salesmen have been registered in the Securities Division. In the same period the sale in the Commonwealth of securities having an aggregate par value of \$64,150,450 has been forbidden. Since the effective date of the Sale of Securities Act (August 26, 1921), the sale of securities aggregating more than \$3,064,000,000 par value has been prohibited. Seventy-three formal hearings have been held by the Director of the Division during the year arising in connection with sales of securities or the manner in which brokers and salesmen conducted their business. Twenty-nine appeals from the orders and findings of the Division were filed with and acted upon by the Commission during the year. The registration of 11 brokers and 70 salesmen was cancelled by request of the registrants, and the registration of 10 brokers and 12 salesmen was cancelled by orders of the Division after notice and hearing. In addition, the registration of 193 salesmen was cancelled for failure to file with the Division change of employing broker, and the registration of 3 salesmen was suspended while the applications for registration of 7 salesmen were denied after a hearing.

Approximately 1,342 complaints against brokers and salesmen were investigated by the Division. Six cases were referred to the Attorney General under the provisions of section 20 of the Sale of Securities Act during the year.

SMOKE ABATEMENT

During the year ended November 30, 1937, 351,325 observations were made.

Violations were noted in 968 cases. In many instances, the adoption of suggestions made by the Division of Smoke Inspection resulted in improved combustion and a consequent decrease in the number of violations. Ten formal hearings were held and 5 formal orders issued during the year. Court proceedings were brought against 4 companies. One hundred and seventy-three complaints have been filed and investigated, an increase of 32 in the number filed during the preceding year.

RECOMMENDATIONS FOR LEGISLATION

Sale of Securities Act:

We renew our recommendation of the last three years, that the word "security" should be defined to include mineral deeds conveying fractional interest in minerals or oils, and we repeat what was said in the Department's recommendations for legislation in 1934, as follows:

Many persons in this Commonwealth have been engaged in the sale of mineral deeds conveying fractional interests in the minerals or oil under the ground. There has been some conflict of opinion as to whether these mineral deeds are within the purview of the Sale of Securities Act. On April 16, 1934, in the Suffolk Superior Court it was ruled by the presiding justice that certain mineral deeds did not constitute securities within the meaning of the Sale of Securities Act. We see no reason why these mineral deeds should not be included in the term "security" when oil, gas and mining leases and certificates of interest in or under the same are all included under the term "security" in the act. There is little or no distinction between the two, and the evil of the indiscriminate sale of the one is the same as in the other.

Commercial Motor Vehicles:

The transfer of a distinguishing plate, prescribed and furnished by the Department for motor vehicles operated in the conduct of the business of transporting property for hire, is prohibited by law except upon the authority and consent of the Department. During the past fiscal year 1,442 applications were filed with the Commercial Motor Vehicle Division for the transfer of plates. It is not free from doubt whether or not the law makes provision for the payment of a fee for such transfer, and the making thereof imposes a considerable amount of additional clerical work upon the Division, and in the opinion of the Commission justifies the charging of a moderate fee. Consequently, we recommend the passage of legislation requiring the payment to the Department of a fee of 50 cents for each transfer of a distinguishing plate from one vehicle to another.

Railroad Grade Crossings:

Section 142 of chapter 160 of the General Laws provides for the placing and maintaining of warning signs on a public way where the way crosses the tracks of a railroad at grade. The section prescribes not only the type and location of the signs, but also the color and marking of the discs. The Department, in connection with matters relating to protection at railroad grade crossings, has, in several situations, believed that reflector buttons on warning signs would be desirable as a safety factor. Other occasions may arise where reflector buttons, in the judgment of the Commission, should, in the public interest, be added to the yellow discs of the signs.

In view, however, of the specific language of section 142 noted above, we doubt the authority of the Department to require the adding of reflector buttons to the discs without amendment of the law. Consequently, we recommend an amendment of section 142 of chapter 160 of the General Laws, giving the Department discretionary power to require that warning signs on any public way where the way crosses the tracks of a railroad at grade be equipped with reflector buttons.

Smoke Inspection:

At the suggestion of the Director of the Division of Smoke Inspection we recommend an amendment to chapter 651 of the Acts of 1910, as amended by

chapter 50 of the Acts of 1915. The purpose of this amendment is to place an additional restraint on the emission of smoke from stacks defined under said act as falling under class two.

The present act authorizes a greater emission of dense smoke by stacks falling under class two than from those falling under either class one or class three, as defined by the act. We are at a loss to see why this distinction is made.

Fees for Testing Gas Meters:

The fees for testing gas meters remain substantially the same as established in 1861, notwithstanding the fact that important changes have been made in the manufacture of gas meters. Changes have been made in all meters, even the five-light meter which formerly had a capacity of 30 cubic feet per hour and which now has a capacity of 150 to 175 cubic feet per hour. Larger dry meters have been made with capacities up to 10,000 cubic feet per hour. There has been presented to the Department for testing and sealing a so-called rotary displacement meter which has a capacity of some 9,000 cubic feet per hour, and which takes some hours to set up and test, but for which test a fee of but 25 cents can be legally collected.

For these reasons a change in the calculation of the fees should be established by rules of the Department.

In the case of electric meters (section 121, chapter 164 of the General Laws) "the department may establish such rules and regulations, fix such standards, prescribe such fees, and employ such means and methods in, and in connection with, such examinations and tests of electric meters as it deems most practicable, expedient and economical," and the Department recommends that the same method be adopted in connection with the fees for testing gas meters.

Commissioner Curley, owing to his serious illness, has been unable to participate in the preparation of this report.

Respectfully submitted,

J. BURKE SULLIVAN, *Chairman*,
LEO H. LEARY,
RICHARD D. GRANT,
A. C. WEBBER,

Commissioners.

